

### **REMARKS**

In response to the Office Action mailed December 16, 2005, Applicants respectfully request reconsideration. To further the prosecution of this application, amendments have been made in the claims, and each of the rejections set forth in the Office Action has been carefully considered and is addressed below. The claims as presented are believed to be in condition for allowance.

Claims 1-23 were previously pending in this application. Claims 1, 10, 15 and 20 are amended herein. As a result, claims 1-23 remain pending for examination, with claims 1, 10, 15 and 20 being independent. No new matter has been added.

#### **Rejections Under 35 U.S.C. §112**

Claims 1, 15 and 20 are rejected under 35 U.S.C. §112 as purportedly being based on a disclosure which is not enabling. Specifically, the Office Action alleges that claims 1, 15 and 20 fail to recite essential steps for converting a discovery stream into an N-ary tree. Applicants respectfully disagree, as each of claims 1, 15 and 20 recite acts performed to convert a service discovery stream into an N-ary tree. Nevertheless, to further the prosecution of this application, each of claims 1, 15 and 20 has been amended to recite that these acts are repeated until an N-ary tree is formed. As a result, Applicants respectfully request that the rejection of claims 1, 15 and 20 under 35 U.S.C. §112 be withdrawn.

#### **Rejections Under 35 U.S.C. § 103**

Claims 1-7, 10-11, 15-16 and 20-21 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,532,476 to King ("King") in view of U.S. Patent No. 6,031,977 to Pettus ("Pettus"). Applicants respectfully traverse, as each of the independent claims has been amended to distinguish the prior art of record.

##### **A. Claims 1-9**

As amended, claim 1 recites a computer-readable medium having instructions for performing steps to convert a service discovery stream into an N-ary tree. The steps comprise, *inter*

*alia*, determining a data type of one of the nodes from the service discovery stream, wherein determining the data type of the node comprises identifying the data type from a collection of data types. The collection of data types comprises nil, unsigned integer, signed integer, universally unique identifier, text string, Boolean, uniform resource locator, data element sequence, and data element alternative data types.

The Office Action states, in the “Response to Arguments” section, that the argument made by Applicants in the previous response (dated September 16, 2005) is unavailing, because the feature allegedly relied upon to distinguish the prior art is not recited by claim 1. More particularly, the Office Action states that Applicants’ previous argument that King neither discloses nor suggests determining a data type (such as unsigned integer, signed integer, Boolean, text string, etc.) is not persuasive because these data types are not recited by the claim. Claim 1 is amended herein to require that the determination of a data type of a node comprises identifying the data type from a collection of data types comprising nil, unsigned integer, signed integer, universally unique identifier, text string, Boolean, uniform resource locator, data element sequence and data element alternative data types.

Neither King nor Pettus disclose or suggest determining a data type of a node in the manner recited by amended claim 1. For example, King fails to disclose or suggest determining a data type of a node, and certainly not by identifying the data type from a collection of data types. Rather, King discloses a process, described with reference to Fig. 2 and Table 1, for forming a dynamic array (“DynArray”) which serves as a persistent storage model (col. 7, lines 63-67 and col. 8, lines 12-31). King discloses determining a node type for a record to be stored according to the storage model, but neither discloses nor suggests identifying a data type from a collection of data types.

Pettus fails to remedy this deficiency of King, as Pettus discloses a directory service located on one or more nodes in a network to assist a client in accessing remote services (Abstract). This directory service comprises a tree structure to which services may be added (Abstract). Nodes in the tree structure provide references to services, and shared libraries which store a service object associated with specific services offered on the network (Abstract). Pettus fails to disclose anything

at all related to determining a data type of a node in a service discovery stream, and certainly not by identifying a data type from a collection of data types.

In view of the foregoing, claim 1 patentably distinguishes over the prior art of record, such that the rejection of claim 1 under 35 U.S.C. §103 as purportedly being obvious in view of a combination of King and Pettus should be withdrawn.

Claims 2-9 depend from claim 1 and are allowable for at least the same reasons.

B. Claims 10-14

As amended, claim 10 recites a method to convert a service discovery stream to an N-ary tree. The method comprises, *inter alia*, a step of determining an element type of a first element from the service discovery stream, wherein determining the element type of the first element comprises identifying the element type from a collection of element types comprising nil, unsigned integer, signed integer, universally unique identifier, text string, Boolean, uniform resource locator, data element sequence and data element alternative element types.

As should be clear from the discussion above with reference to claim 1, neither King nor Pettus disclose or suggest determining an element type of a first element in a service discovery stream, wherein determining the element type comprises identifying the element type from a collection of element types comprising nil, unsigned integer, signed integer, universally unique identifier, text string, Boolean, uniform resource locator, data element sequence and data element alternative element types. Thus, for at least the reasons discussed above with reference to claim 1, claim 10 patentably distinguishes over the asserted combination, such that the rejection of claim 10 under 35 U.S.C. §103 as purportedly being obvious in view of a combination of King and Pettus should be withdrawn.

Claims 11-14 depend from claim 10 and are allowable for at least the same reasons.

C. Claims 15-19

As amended, claim 15 recites a method to convert a service discovery stream to an N-ary tree. The method comprises, *inter alia*, a step of determining an element type of a first element from the service discovery stream, wherein determining the element type of the first element comprises identifying the element type from a collection of element types comprising nil, unsigned integer, signed integer, universally unique identifier, text string, Boolean, uniform resource locator, data element sequence and data element alternative element types.

As should be clear from the foregoing, the prior art of record fails to disclose or suggest determining an element type for a first element in a service discovery stream in the manner required by claim 15. As a result, claim 15 patentably distinguishes over the prior art of record, such that the rejection of claim 15 under 35 U.S.C. §103 as purportedly being obvious in view of a combination of King and Pettus should be withdrawn.

Claims 16-19 depend from claim 15 and are allowable for at least the same reasons.

D. Claims 20-23

As amended, claim 20 recites a method to convert a service discovery stream to an N-ary tree. The method comprises, *inter alia*, determining, if a stream size is not equal to zero, a data type of a data element from the service discovery stream, wherein determining the data type comprises identifying the data type from a collection of data types comprising nil, unsigned integer, signed integer, universally unique identifier, text string, Boolean, uniform resource locator, data element sequence and data element alternative element types.

As should be clear from the foregoing, the prior art of record fails to disclose or suggest a method comprising determining, if a stream size is not equal to zero, a data type of a data element from a service discovery stream, wherein determining the data type comprises identifying the data type from a collection of data types comprising nil, unsigned integer, signed integer, universally unique identifier, text string, Boolean, uniform resource locator, data element sequence and data element alternative element types. As a result, claim 20 patentably distinguishes over the prior art

of record, such that the rejection of claim 20 under 35 U.S.C. §103 as purportedly being obvious in view of a combination of King and Pettus should be withdrawn.

Claims 21-23 depend on claim 20 and are allowable for at least the same reasons.

### **CONCLUSION**

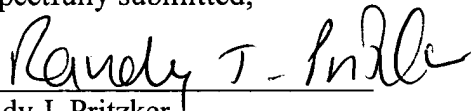
In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 23/2825, under Order No. M1103.70165US00 from which the undersigned is authorized to draw.

Dated: March 15, 2006

x03/16/2006x

Respectfully submitted,

By 

Randy J. Pritzker

Registration No.: 35,986

WOLF, GREENFIELD & SACKS, P.C.

Federal Reserve Plaza

600 Atlantic Avenue

Boston, Massachusetts 02210-2206

(617) 646-8000